CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 75-581

CHEMISTRY REVIEW(S)

- CHEMISTRY REVIEW NO. 3 (three)
- 2. ANDA # 75-581
- 3. NAME AND ADDRESS OF APPLICANT
 Teva Pharmaceuticals USA
 Attention: Deborah A. Jaskot
 1510 Delp Drive
 Kulpsville, PA 19443

4. LEGAL BASIS FOR SUBMISSION

This application refers to the listed drug Nizoral® (ketoconazole) 2% Cream. Patent certification: The undersigned hereby (Debrah A. Jaskot, Sr. Director, regulatory affair) certifies that to the best of our knowledge and in Teva pharmaceuticals USA's opinion there is one patent which claims the listed drug Nizoral® (ketoconazole) 2% Cream. U.S. Patent No. 4335125 Expiration June 15, 1999. In accord with Section 505 (j)(2)(A)(vii)(III) of the Food, Drug and cosmetic Act, as amended, TEVA pharmaceuticals USA certifies U.S. Patent #4335125 will expire on June 15, 1999.

Exclusivity statement:

The undersigned hereby (Deborah A. Jaskot, Sr. Director, Regulatory Affairs) certifies that to the best of our knowledge and in Teva pharmaceuticals USA's opinion, there exist no listed exclusivities for the referenced drug product, Nizoral® (ketoconazole) 2% Cream.

Certification made pursuant to the generic drug enforcement act of 1992 is included (page 17).

Addendum to form FDA 3454:

Certification: financial interest and arrangements of clinical investigators is included in pages 18A and 18B.

- 5. SUPPLEMENT(s)
 None
- 6. PROPRIETARY NAME
- 7. NONPROPRIETARY NAME Ketoconazole Cream, 2%
- 8. <u>SUPPLEMENT(s) PROVIDE(s) FOR:</u>
 None
- 9. AMENDMENTS AND OTHER DATES:
 Date of submission: February 12, 1999
 Major amendment: September 20, 1999
 Fax amendment: March 16, 2000
 Telephone amendment: April 6, 2000
- 10. PHARMACOLOGICAL CATEGORY
 antifungal (for the topical treatment of timea corporis)
- 11. Rx or OTC

12. RELATED IND/NDA/DMF(s)

Nizoral® cream 2% NDA# 19084 (Dec 31, 1985 approval date) Patent expiration: June 15, 1999 NDA holder: Janssen Pharmaceutica

- 13. <u>DOSAGE FORM</u> Cream
- 14. POTENCY--2%

15. CHEMICAL NAME AND STRUCTURE

Ketoconazole. $C_{26}H_{28}Cl_2N_4O_4$. 531.44. Piperazine, 1-acetyl-4-[4-[[2-(2,4-dichlorophenyl)-2-(1H-imidazole-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-, cis-. 65277-42-1. Antifungal.

- 16. RECORDS AND REPORTS
 None
- 17. <u>COMMENTS</u>
 This application is approvable.
- 18. <u>CONCLUSIONS AND RECOMMENDATIONS</u>
 This application is approvable.
- 19. REVIEWER:
 Liang-Lii Huang, Ph.D.
 Endorsed by Paul Schwartz, Ph.D. /March 29, 2000

Contain Trade Secret,

Commercial/Confidential Information and are not releasable.

Chem Rev 3 3/29/00

- 1. CHEMISTRY REVIEW NO. 2 (two)
- 2. ANDA # 75-581
- NAME AND ADDRESS OF APPLICANT

Teva Pharmaceúticals USA Attention: Deborah A. Jaskot 1510 Delp Drive Kulpsville, PA 19443

4. LEGAL BASIS FOR SUBMISSION

This application refers to the listed drug Nizoral® (ketoconazole) 2% Cream. Patent certification: The undersigned hereby (Debrah A. Jaskot, Sr. Director, regulatory affair) certifies that to the best of our knowledge and in Teva pharmaceuticals USA's opinion there is one patent which claims the listed drug Nizoral® (ketoconazole) 2% Cream. U.S. Patent No. 4335125 Expiration June 15, 1999. In accord with Section 505 (j)(2)(A)(vii)(III) of the Food, Drug and cosmetic Act, as amended, TEVA pharmaceuticals USA certifies U.S. Patent #4335125 will expire on June 15, 1999.

Exclusivity statement:

The undersigned hereby (Deborah A. Jaskot, Sr. Director, Regulatory Affairs) certifies that to the best of our knowledge and in Teva pharmaceuticals USA's opinion, there exist no listed exclusivities for the referenced drug product, Nizoral® (ketoconazole) 2% Cream.

Certification made pursuant to the generic drug enforcement act of 1992 is included (page 17).

Addendum to form FDA 3454:

Certification: financial interest and arrangements of clinical investigators is included in pages 18A and 18B.

- 5. SUPPLEMENT(s)
 None
- 6. PROPRIETARY NAME
 None
- 7. NONPROPRIETARY NAME Ketoconazole Cream, 2%
- 8. <u>SUPPLEMENT(s) PROVIDE(s) FOR:</u>
 None
- 9. AMENDMENTS AND OTHER DATES:
 Date of submission: February 12, 1999
 Major amendment: September 20, 1999
- 10. PHARMACOLOGICAL CATEGORY antifungal (for the topical treatment of timea corporis)
- 11. Rx or OTC
- 12. RELATED IND/NDA/DMF(s)

Nizoral® cream 2% NDA# 19084 (Dec 31, 1985 approval date) Patent expiration: June 15, 1999 NDA holder: Janssen Pharmaceutica Contain Trade Secret,

Commercial/Confidential

Information and are not
releasable.

chem Rev 2 2/16/00

- 1. CHEMISTRY REVIEW NO. 1 (one)
- 2. ANDA # 75-581
- 3. NAME AND ADDRESS OF APPLICANT
 Teva Pharmaceuticals USA
 Attention: Deborah A. Jaskot
 1510 Delp Drive
 Kulpsville, PA 19443

4. LEGAL BASIS FOR SUBMISSION

This application refers to the listed drug Nizoral® (ketoconazole) 2% Cream.

Patent certification: The undersigned hereby (Debrah A. Jaskot, Sr. Director, regulatory affair) certifies that to the best of our knowledge and in Teva pharmaceuticals USA's opinion there is one patent which claims the listed drug Nizoral® (ketoconazole) 2% Cream. U.S. Patent No. 4335125 Expiration June 15, 1999. In accord with Section 505 (j)(2)(A)(vii)(III) of the Food, Drug and cosmetic Act, as amended, TEVA pharmaceuticals USA certifies U.S. Patent #4335125 will expire on June 15, 1999.

Exclusivity statement:

The undersigned hereby (Deborah A. Jaskot, Sr. Director, Regulatory Affairs) certifies that to the best of our knowledge and in Teva pharmaceuticals USA's opinion, there exist no listed exclusivities for the referenced drug product, Nizoral® ... (ketoconazole) 2% Cream.

Certification made pursuant to the generic drug enforcement act of 1992 is included (page 17).

Addendum to form FDA 3454:

Certification: financial interest and arrangements of clinical investigators is included in pages 18A and 18B.

- 5. SUPPLEMENT(s)
 None
- 6. PROPRIETARY NAME
 None
- 7. NONPROPRIETARY NAME Ketoconazole Cream, 2%
- 8. SUPPLEMENT(s) PROVIDE(s) FOR:
- 9. AMENDMENTS AND OTHER DATES:
 Date of submission: February 12, 1999
- 10. PHARMACOLOGICAL CATEGORY
 antifungal (for the topical treatment of timea corporis)
- 11. Rx or OTC
- 12. RELATED IND/NDA/DMF(s)

Nizoral® cream 2% NDA# 19084 (Dec 31, 1985 approval date) Patent expiration: June 15, 1999 NDA holder: Janssen Pharmaceutica

- 13. DOSAGE FORM Cream
- 14. POTENCY 2%

15. CHEMICAL NAME AND STRUCTURE

Ketoconazole. $C_{26}H_{28}Cl_2N_4O_4$. 531.44. Piperazine, 1-acetyl-4-[4-[[2-(2,4-dichlorophenyl)-2-(1*H*-imidazole-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]-, cis-. 65277-42-1. Antifungal.

- 16. RECORDS AND REPORTS None
- 17. <u>COMMENTS</u>
 This application is not approvable.
- 18. <u>CONCLUSIONS AND RECOMMENDATIONS</u>
 This application is not approvable.
- 19. REVIEWER: DATE COMPLETED:
 Liang-Lii Huang, Ph.D. June 30, 1999
 Endorsed by Paul Schwartz, Ph.D. /June 30, 1999
 Cc.

Enc

Contain Trade Secret,

Commercial/Confidential

Information and are not
releasable.

clem Rev 6/30/99